H. N. G. University, Patan M.C.A(5 Years Integrated Programme) – Semester - VI 603: Web Development using PHP

Unit: 1 [25%]

Building blocks of PHP: Basic syntax, Variables, Data Types, Operators and expressions, Constants. Flow Control: Switch flow, Loops, Code Block, Sending data to the browser.

Working With Arrays: Arrays, Creating array, Array related Functions.

Working with Function: Function, Calling Function, Defining Function, Returning the Values from user defined function, Variable Scope, Argument.

Working with Strings, Date and Time Functions: formatting String with PHP, Date and Time Function, String Manipulation and Investigating Strings with PHP.

Working with Forms: Creating form, Handling form, Validating form data, Accessing form data, use of Hidden fields to save State, Redirecting user, file Upload and Sending Mail on Form Submission.

Working with Cookies and User Session: Introduction of Cookie, Setting a Cookie with PHP, Introduction of Session and Improving Session Security, Starting a Session, Working with Session Variables, Passing Session Id in the query String, Destroying Session and Unsetting Variables.

Unit: 2 [30%]

Error Handling and Debugging: General error types and debugging, displaying PHP errors, Adjusting Error Reporting, Creating Custom error handler, PHP debugging techniques. **Filter:** Types of Filter, Functions of Filter, Validate the data with filter option and sanitize.

Understanding the Database Design Process: The importance of good database design, Types of Table Relationship, Understanding Normalization.

Learning Basic SQL Command: Table Creation, Insert row, Select Command Using Where Clause, Update and Delete Command, Replace Command, String Function, Date and Time Functions, Stored Procedures, Join, Indexing and Sorting query.

Using MySQL with PHP: Connecting to MySQL and selecting the database, executing simple queries, retrieving query results, counting return Records, updating, Record Addition, Viewing Record, and Deletion Record with PHP.

MYSQL Error Handling: SQL and MySQL debugging techniques. **Connecting database with DSN:** ODBC Connectivity Function.

Unit: 3 [30%]

Working with files: Include Files with INCLUDE, creating and deleting files, opening a file for reading, writing or Appending, Reading from files, Validating Files.

Working with Directories: Directory related function.

Working with Images: Image related function. Miscellaneous function.

Introduction to OOP: Introduction, the basic, auto loading objects, Class, Extends, Constructs, Scope Resolution Operator, Parent, serializing object, The magic objects sleep and awake, reference inside the constructor, comparing objects. Visibility, overloading, object interface, pattern, magic method, reflection, extending exception.

Unit: 4 [15%]

Introduction to Joomla: Introduction to Joomla including 1.0,1.5 and 1.6, Site-wide settings and user management, Setting up and organizing menus and navigation, Managing content articles, Working with Joomla components, Using Joomla modules and plugins, Choosing and configuring Joomla templates.

Text Book:

- 1. Beginning PHP 5 by Wrox.
- 2. Julie C. Meloni, PHP MySQL and Apache, SAMS Teach Yourself, Pearson Education.

Reference Books:

- 1. PHP and MySQL for dynamic Web Sites: Visual Quickpro Guide, Second Edition by Larry.
- 2. Programming PHP By Rasmus Lerdorf, Kevin Tatroe, Peter MacIntyre.
- 3. The Complete Reference PHP by Steven Holzner Joomla: Bible, Wiley India Pvt. Ltd – Ric Shreves